TACTICAL RIDES

1 TO 14 INCLUSIVE WITH APPROVED SOLUTIONS

THE GENERAL SERVICE SCHOOLS
THE SCHOOL OF THE LINE
FORT LEAVENWORTH, KANSAS

1920-1921



THE GENERAL SERVICE SCHOOLS PRESS
FORT LEAVENWORTH, KANSAS

The School of the Line 1920-1921

Course in Field Engineering TACTICAL RIDE No. 1-Sketching

(FE 7)

September 14, 1920

Prepared by MAJOR LEWIS H. WATKINS. Corps of Engineers

General Situation:

Missouri (Blue) and Kansas (Red) are at war.

Special Situation (Blue):

With orders to seize a bridgehead at Fort Leavenworth and cover the crossing of the remainder of the I Blue Corps, troops of the 1st Blue Division, early today, forced a crossing of the Missouri River and seized Fort Leavenworth and Sheridan Ridge (1 mile west). A ponton bridge is being constructed across the Missouri River at the Fort Leavenworth railroad station.

The Red forces, driven out of Fort Leavenworth, are holding Salt Creek (2 miles west). Red balloons are in position west of Salt Creek.

The Blues have no good maps of the area around Fort Leavenworth. You are an officer on the staff of the 1st Blue Division. At noon, today, you received the following verbal instructions from your commanding officer:

"Go to Fort Leavenworth at once and make a sketch (scale 6"=1 mile) showing roads available for advance of troops and trains, within the area between the 750 and the 751 east and west co-ordinates, and as far west as the National Cemetery. Select and make a place for a supply dump west of Grant Avenue, and indicate by blue pencil a round trip circuit for truck trains from ponton bridge to selected dump. Here is a sketch (attached) compiled from old maps, on which roads are indicated by dashed lines. Deliver sketch to me at the hospital, Fort Leavenworth, at 4:30 PM today.

In compliance with the above instructions, it is assumed that you have now reached the school building. Fort Leavenworth.

NOTES FOR MEMBERS OF THE CLASS

1. Your sketch must show character of roads.

2. All information must be placed on sketch by use of conventional

signs, as far as practicable. No written or verbal report desired.

3. Assume that the engineers will construct a two-way road from ponton bridge to railroad station.

The School of the Line 1920-1921

Course in Field Engineering
TACTICAL RIDE No. 2—Sketching
(FE 10)

September 17, 1920

Prepared by
MAJOR RALPH T. WARD,
Engineers

General Situation:

The Kansas River (about 20 miles south of Leavenworth) is the boundary between hostile states, Blue (south) and Red (north).

The Blue army has invaded the Red state and has driven the Red forces north to the general vicinity of Plum Creek, where further advance has been strongly resisted. The Blue forces have been repulsed in all attempts to move north of the Millwood Road.

Special Situation:

(Given out in the vicinity of Taylor S. H.)

The 2d Blue Division has advanced north and for the last two days has had its outpost line of observation generally along the line 343.8—753.4—344.4—752.9—Millwood Road—346.0—752.9—346.6—753.3.

You are Major B of the division commander's staff.

At this time and this place you receive the following message:

2d Div, SENTINEL HILL, 17 Sept 20, 11:00 AM.

Major B:

A captured Red sergeant states that the Red forces are massing in or near Kickapoo for an attack.

We will meet any attack at our present position (line 346.7—752.9, J. Daniels Farm House, 345.0—752.6, M. Swartz Farm House, 343.7—753.2). The 1st Division extends our line to the east and the 3d Division to the west. Our balloons are all shot down.

You will make a sketch of the area north of the MILLWOOD ROAD as far north as Plum Creek and between co-ordinates 344.0 and TAYLOR S. H. Show such data as would be of importance in view of enemy's possible attack. Show in red enemy trench lines and troops as positively known by our outposts.

Inclosed is sketch compiled from outpost sketches and small scale maps. Scale 6 inches equals one mile.

Messages to SENTINEL HILL.

By orderly.

Notes

In general, line of outguards is on Millwood Road. Members of the class can go freely behind the line of outguards. Outguard No. 3 is located near Taylor S. H. crossroads.

Outguard No. 4 is on duty only at night. Outguard No. 5 is located near M. Swartz farm house. During reconnaissance visit these places where you will receive information as would be given you by an outguard in war time.

Use red pencil to indicate hostile troops and works. Assemble at Taylor S. H. crossroads at 4:00 PM.

Following information received from outguards:

OUTGUARD No. 3 (AT TAYLOR S. H.)

1. The hostile trenches are visible in the thin trees on the southeast slope of Crook Point—about 100 and 200 yards this side of the crest. Trenches about 200 yards long—eastern end about 322 degrees true and 313 magnetic azimuth from Taylor school

2. Says there is a Red machine gun covering road leading

north between Outguard 3 and Outguard 5.

3. Says there is a hostile outguard in orchard behind J. Aaron

house nearly due north from outguard.
4. Says there is a hostile machine gun on Crook Point just around the nose from the eastern edge of the trenches.

OUTGUARD No. 5

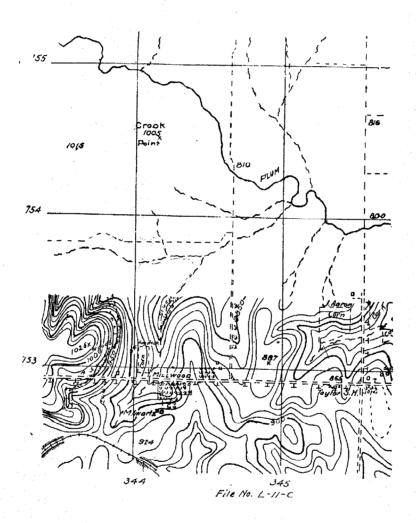
1. Confirms 1 and 3 of Outguard No. 3.

2. Says there is a hostile machine gun covering road between Outguard No. 3 and Outguard No. 5. Says it is located on east side of road and on crest of first rise about 1,800 yards from Millwood Road. Confirms 2 of Outguard No. 3.

3. There is a Red outguard in the group of houses immediately north of the house marked M. Swartz and about 1,000 yards north

of the Millwood Road.

4. There are Red machine guns on Crook Point, just around nose from end of Red trenches and on edge of trees and at about the elevation of the lower Red trench. Confirms 4 of Outguard



The School of the Line 1920-1921

Course in Tactics and Technique
TACTICAL RIDE No. 3 and 4—Infantry
(TT 5 and 7)

September 29, 1920

Prepared by
Major Joseph A. McAndrew,
Infantry

Map: Leavenworth 3".

General Situation:

Kansas (Blue) and Missouri (Red) are at war. A Red reinforced brigade, based on Kansas City, marched north in Kansas territory, and had reached the vicinity of Leavenworth late yesterday afternoon.

Special Situation:

The 1st Blue Division, General A in command, has been ordered south to protect the river crossings at Leavenworth and Fort Leavenworth.

Early this morning, as the head of the 1st Blue Division was marching south from Kickapoo, General A received information from his advance guard that its advance had been stopped by a heavy fire from all arms from the high ground just north and south of Corral Creek, and extending from South Merritt Hill to hill 881.

The Blue advance guard is holding the general line, Pope Avenue to road junction B; thence southwest along Prison Lane to southern corner of National Cemetery; thence west to Hancock Avenue.

General A, after making his reconnaissance, decided to attack at 2:00 PM the hostile position and envelop the enemy's left. The 1st Brigade to attack South Merritt Hill. The 2d Brigade to attack hill 881 and envelop the enemy's left. Boundary line between brigades, road junction D, eastern edge of U. S. Penitentiary (all to 2d Brigade).

General C, commanding 1st Brigade, after making his reconnaissance, ordered the 2d Infantry (Colonel D), reinforced by Company A, 1st Machine Gun Battalion, to attack the enemy's position between the west boundary of the 1st Brigade to Grant Avenue (exclusive). General C ordered the 1st Infantry to attack the enemy's positions between Grant Avenue (inclusive) and the Missouri River.

Station for slightly wounded: Shroeders (347.4-752.9).

Ammunition distributing station; Point (349.6-751.7).

Axes of Signal Communications

1st Brigade: hill 887 (Engineer Hill-hill 885 (South Merritt Hill)—point (349—747.2).

1st Infantry: Same as brigade axis.

2d Infantry: 253-A, Grant Avenue—Pope Hill—Grant Hill.

Command Posts

1st Brigade: Clothing depot (349-750.6).

1st Infantry: Superintendent's quarters in National Cemetery.

2d Infantry: Quarters 253-A Grant Avenue (349.7-750).

PART I

Requirement:

Paragraph III of Colonel D's attack order.

Time allowed: Thirty minutes. Discussion of above paragraph.

PART II

Additional Extracts from Colonel D's Attack Order

Zones of Action:

1st Battalion, 2d Infantry:

East boundary, Grant Avenue, exclusive.
West boundary, road junction C—point (348.9—747.2).

2d Battalion, 2d Infantry:

East boundary, same as west boundary. 1st Battalion, 2d Infantry.

West boundary, road junction D-eastern edge of U. S. Penitentiary (exclusive).

The 2d Battalion, 2d Infantry (Major E), reinforced by Company A, 2d Machine Gun Battalion, 1 section light mortars and 1 section one-pounders, is the right assault battalion of the 2d Infantry.

Command posts:

western corner National Cemetery

Requirement:

Major E's attack order.

Time allowed: Thirty minutes. Discussion.

An Approved Solution

Prepared by Major Joseph A. McAndrew. Infantry

REQUIREMENT, PART I

1st Infantry

Paragraph III of Attack Order

3. (a) The 2d Battalion, reinforced by the Machine Gun Company A, 2d Infantry, 1 section Stokes mortars and 1 section one-pounders, is the left assault battalion and will attack South MERRITT HILL and the high ground south of CORRAL CREEK. Zone of Action:

East boundary: Grant Avenue (exclusive).

West boundary: Road junction C—point 348.9—747.2).

(b) The 1st Battalion, reinforced by Company A, 2d Machine Gun Battalion, 1 section Stokes mortars and 1 section one-pounders, is the right assault battalion and will attack the enemy positions north and south of Corral Creek and will cooperate with the 2d Battalion in the capture of South Merritary Hull, by pushing down the rayings west and southwest. RITT HILL, by pushing down the ravines west and southwest of South Merritt Hill.

Zone of Action:

East boundary: Same as west boundary, 2d Battalion. Western boundary: Road junction D-eastern edge of U. S. PENITENTIARY (exclusive).

- (c) The 3d Battalion is in regimental reserve, and will await orders in its present position (northern slope of CEMETERY RIDGE).
- (d) The Stokes mortar platoon (less 2 sections) will go into a position in the ravine north of Engineer Hill and will cover the western slopes of SOUTH MERRITT HILL.

(e) The one-pounder platoon (less 2 sections) will take a position on Engineer Hill and be ready to destroy any enemy machine guns which may be located.

(f) Pioneer Platoon (less 1 section), is attached to the 1st Battalion, and one section is attached to the 2d Battalion.

REQUIREMENT, PART II

Verbal orders issued by Major F, commanding 1st Battalion, to his company commanders and commanders of the auxiliary weapons, surgeon, staff, and commander of pioneer section, from a point near the road junction D:

1. (a) The enemy's advanced troops are holding a position extending from that hill (indicating) which is called South Merritt Hill, along that high ground to that hill (indicating) which

is called hill 881.

- (b) The 2d Battalion of our regiment attacks on our left, the 1st Battalion, 3d Infantry, attacks on our right. The 3d Battalion of our regiment is in regimental reserve. The 2d Machine Gun Battalion (less Company A) neutralizes the woods just south of Merritt Lake. The Stokes mortar platoon (less 2 sections) will cover the eastern slopes of South Merritt Hill. The one-pounder platoon (less 2 sections) will be ready to destroy any hostile machine guns that may be lo-
- 2. (a) This battalion, reinforced by Company A, 2d Machine Gun Battalion, 1 section Stokes mortars, and 1 section one-pounders, will attack the hostile positions north and south of Corral Creek and will co-operate with the 1st Battalion in the capture of South Merritt Hill by pushing down the ravines west and south of South Merritt Hill.

 (b) The leading wave of this battalion will pass that road (indicat-

ing country road just south of their position) at 2:00 PM.

(c) Zone of Action:

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East boundary, road junction C (indicating)—point (348.9—747.2) (pointing it out on map).

West boundary, center of target butts just south of point marked, road junction D (indicating) eastern edge of U. S. Penitentiary (pointing it out), exclusive.

3. (a) Company A, as the right assault company, is the base company, and will deploy for the jump-off with its right resting at road junction D and will attack on a 250-yard front.

Direction of advance 166° magnetic.

(b) Company B, as the left assault company, will deploy for the jump-off in that cemetery with its left resting at the eastern corner of that cemetery (pointing it out) and will attack on a 250-yard front. Direction of advance 166° magnetic.

(c) Company C, as right reserve company, and Company D, as left reserve company, will form for the attack in woods north of Hancock Avenue in rear of the assault companies. The advance of these companies will be regulated by me.

(d) Company A, 2d Machine Gun Battalion, will go into a first firing position in the edge of those woods (pointing), and will

support the advance of the assault companies.

(e) The Stokes mortar section, from a position near road junction D, will sweep the Corral Creek ravine in our front.
(f) The one-pounder section, from a position just west of this point, will hold itself in readiness to destroy instantly any hostile machine guns that might be located.

(g) A combat patrol consisting of one squad from Company D will protect the left flank of the battalion. A combat patrol consisting of one squad from Company C will protect the right flank of the battalion.

(h) The pioneer platoon (less one section) will assist the auxiliary

weapons in crossing Corral Creek.

(a) Station for slightly wounded: Shroeders (347.3—752.9).
(b) Battalion aid station in woods just north of battalion command post, in readiness to cover the battalion advance.
(c) Combat wagons, after having issued extra ammunition, will go to ammunition distributing station—point (349.5—751.7).

They will refill and return to a position in woods just north of battalion headquesters of battalion headquarters.
(d) Rolling kitchens will remain in their present positions.

5. Battalion command post there (indicating position at western corner of National Cemetery).
The official time is 12:55 PM.

The School of the Line 1920-1921

Course in Field Engineering TACTICAL RIDE No. 5-Sketching (FE 13)

September 28, 1920

Prepared by MAJOR LEWIS H. WATKINS, Engineers

Map: Sketch issued with problem.

General Situation:

Missouri (Blue) and Kansas (Red) are at war.

Two days ago the 2d Blue Division forced a crossing of the Missouri River at Fort Leavenworth and seized Sheridan Drive, the ridge to the southwest and the city of Leavenworth.

The Red forces confronting the 2d Blue Division on the west show great strength. Early today they attacked and seized Sentinel Hill, but their attack against the main Blue position was repulsed. Strong Red forces are advancing from the south and should reach the city of Leavenworth some time tomorrow.

Special Situation (Blue):

You are Major X on the staff of the 2d Blue Division. The crossing of the 1st Blue Division and the 3d Blue Division, which was to follow the 2d Division, has been seriously delayed.

At 1:00 PM today your commanding officer issued you the following verbal instructions in this room (Sherman Hall):

"The 2d Division will hold its present position, and will prepare for defense a position extending from Wagner Point through National Cemetery southeast to Missouri River. "Make at once a sketch of that portion of the new position

extending from Prison Lane on the west to Grant Avenue on the

east. Sketch should show field of fire to front as far as Corral Creek and should extend to rear to location selected for regimental reserve line. Show in red on your sketch your recommendation for the location of the following lines:

(a) Firing line (omit support line).(b) Battalion reserve line.

(c) Regimental reserve line.
"Here is a sketch compiled from old maps (the one attached). "Turn in your sketch to me at South Merritt Hill at 4:00 PM todav."

NOTES FOR MEMBERS OF THE CLASS

1. Ten minutes to read problem.

2. In order that personal instruction in sketching may be given to those officers who are slow in sketching and do not understand filling in details, sections of the class will begin sketching at the following points:

1st Section at Post Exchange.
2d Section near Corner Pope Avenue and Prison Lane. 3d Section on Prison Lane opposite north corner of National Cemetery.

4th Section on Prison Lane opposite south end of National

Cemetery,

- Before leaving points, each officer will have his sketch inspected by an instructor.
 - 3. A conference will be held on South Merritt Hill at 4:00 PM.

The School of the Line

1920-1921

Course in Tactics and Technique TACTICAL WALK No. 6-Infantry (TT 13)

October 5, 1920

NOTE: - Conducted as a practical exercise.

Prepared by MAJOR J. J. FULMER, Infantry

Schedule

1:15 PM. Assembly of officers at tank shed:

Equipment. Mil rule. Note paper and pencil. Type EE glass (if available).

- 1:15-2:15. Target designation:
 - (a) Intercept—mil—finger—sight.(b) Designation.

 - (c) Location of targets.
- 2:15-2:30. Enroute to landscape target range:

(West end of main target butts near target 37.)

- 2:30—3:15. Demonstration of landscape target firing:
 - (a) Method of harmonizing rifles.
 - (b) Problem—concentrated fire. (c) Problem—distributed fire.

 - (d) Problem-patrol advance involving change of targets.
- 3:15-3:30. Enroute to observation point.*
- 3:30-4:00. Platoon attack.†
- 4:00-4:10. Conference.

^{*}The class at the observation point will carefully observe position of flag and will not advance to the west of north of it on account of the movement of flanking groups.

[†]As the flag moves down the range, following the attack, the class should not advance ahead of it.

PLATOON PROBLEM

Situation:

The enemy is retreating north resisting chiefly with small infantry and machine gun detachments. He is weak in artillery. Our forces are pursuing; friendly platoons are on each flank.

Required:

(Position of platoon south of 1,000-yard butts.)

Your platoon has reached this position. The main body of your company is following at 1,000 yards. No help can be expected from your company, from artillery or any other supporting weapons.

You will advance rapidly to hill in rear of those butts between the railroad on your left and that flag on your right.

You will be informed when to advance.

Phases of Advance to be Noted

- (a) Scouts appear at 1,000-yard butts.
- (b) 1st section appears. 2d section appears.
- (d) Scouts fired upon when they have advanced about 400 yards.
 - Indicate targets by tracer bullets.
 - (e) Platoon leader advances and makes reconnaissance.
 - Signals filtering forward of automatics.
 - Signals filtering forward of 1st Section.
- Sends runner to section leader of 2d Section with orders to envelop right and left flanks with a squad each.
- (f) Execution of platoon leaders' orders.
 (g) As the firing line of the 1st Section builds up, the enemy's fire slows down.
 - (h) 1st Section filters forward by files.
- (i) Flanking groups having gained positions open fire with rifles, automatic rifles and rifle grenades.
- (j) 1st Section advances by "Fire and Movement."
 (k) Enemy opens fire on advancing line from new positions on the right and left.
 - (1) Flanking groups locate and fire on new positions.
- (m) Advance of section continues to about 100 yards of target when final advance is made (note method).
 - (n) Positions having been reduced.
- (o) Scouts move forward, make reconnaissance, platoon reforms, platoon continues advance.

The School of the Line 1920-1921

Course in Tactics and Technique
TACTICAL RIDE No. 7—Infantry
(TT 29)

October 8, 1920

Prepared by Colonel Robert O. Van Horn, Infantry

MAJOR OWEN S. ALBRIGHT, Signal Corps

PART I

Map: Leavenworth 3-inch.

General Situation:

Kansas (Blue) and Missouri (Red) are at war. A Red reinforced brigade, based on Kansas City, marched north in Kansas territory, and had reached the vicinity of Leavenworth late yesterday afternoon.

Special Situation:

The 1st Blue Division, General A in command, has been ordered south to protect the river crossings at Leavenworth and Fort Leavenworth.

Early this morning as the head of the 1st Blue Division was marching south from Kickapoo, General A received information from his advance guard that its advance had been stopped by a heavy fire from all arms from the high ground just north and south of Corral Creek, and extending from South Merritt Hill to hill 881.

The Blue advance guard is holding the general line, Pope Avenue to road junction B (point 348.8—750.3); thence southwest along Prison Lane to southern corner of National Cemetery; thence west to target butts (just south of point "D" on map).

General A after making his reconnaissance decided to attack at 2:00 PM the hostile position and envelop the enemy's left.

The 1st Brigade to attack South Merritt Hill. The 2d Brigade to attack hill 881 and envelop the enemy's left.

Boundary line between brigades point "D" on map (348.2—749.7)—eastern edge of U. S. Penitentiary (all to 2d Brigade).
Division command post road junction 1070 (point 347.9—

General C, commanding 1st Brigade, after making his reconnaissance, ordered the 2d Infantry (Colonel D), reinforced by Company A, 1st Machine Gun Battalion, to attack the enemy's positions between Grant Avenue (inclusive) and the Missouri River.

Station for slightly wounded: Shroeders (347.4-752.9). Ammunition distributing station: Point (349.6-751.7).

Axis of Signal Communication:

1st Brigade: Clothing depot-east corner of cemetery-hill

1st Brigade: Clothing depot—test corner of cemetery—him 885 (South Merritt Hill)—point (349—747.2). 2d Infantry: Same as brigade axis. 1st Infantry: Quarters 253-A, Grant Avenue—Pope Hill— Grant Hill. Command posts:

1st Brigade: Clothing depot (349-750.6).

2d Infantry: Superintendent's quarters in National Cemetery. 1st Infantry: Quarters 253-A, Grant Avenue (349.7-750).

Requirements:

1. Give the organization of the brigade command post. (Location and strength of the various sections, details, etc., of the brigade headquarters personnel present, desired.)

2. State all lines of communication established to and from the brigade message center.

Time allowed: Thirty minutes. Discussion of solution.

PART II

(Continuation of same situation given in Part I)

Map: Leavenworth 3-inch.

The commanding officer, 2d Infantry, included in his written order the following:

(a) The 2d Battalion, reinforced by the Machine Gun Company, 2d Infantry, 1 section light mortars and 1 section one-pounders, is the left assault battalion and will attack South Mer-RIT HILL and the high ground south of CORRAL CREEK.

Zone of action: East boundary, GRANT AVENUE (exclusive).

West boundary, road junction C (348.7-750.3)-point (348.9 - 737.2).

(b) The 1st Battalion, reinforced by Company A, 2d Machine Gun Battalion, I section light mortars and I section one-pounders, is the right assault battalion and will attack the enemy positions north and south of CORRAL CREEK and will co-operate with the 2d Battalion in the capture of SOUTH MERRITT HILL by pushing down the ravines west and southwest of South MERRITT HILL within their zone. East boundary, same as

west boundary, 2d Battalion.

Zone of action: West boundary, point "D" on map (348.2

—749.7)—eastern edge of U.S. Penitentiary (exclusive).

(c) The 3d Battalion is in regimental reserve, and will await orders

in its present position (northern slope of CEMETERY RIDGE).

(d) The Stokes mortar platoon (less 2 sections) will go into a position in the ravine north of ENGINEER HILL and will cover the western slopes of South Merritt Hill.

(e) The one-pounder platoon (less 2 sections) will take a position on Engineer Hill and will be ready to destroy any enemy machine guns that may be located.

(f) The pioneer platoon (less 1 section) is attached to the 1st Battalion, and one section is attached to the 2d Battalion.

Requirements:

- 1. Organization (including location and strength of the various sections, details, etc.) of the regimental headquarters personnel present with the 2d Infantry.
- 2. State all lines of communication established to and from the 2d Infantry headquarters message center.

Time allowed: Twenty minutes. Discussion of solution.

PART III

(Continuation of same situation as given in Parts I and II)

The verbal orders issued by Major F, commanding 1st Battalion Infantry, to his company commanders and commanders of auxiliary weapons from a point near the point "D" on map were as follows:

- 1. (a) The enemy's advanced troops are holding a position extending from that hill (indicating) which is called South Merritt Hill, along that high ground to that hill (indicating) which is called hill 881.
 - (b) The 2d Battalion of our regiment attacks on our left, the 1st
 Battalion, 3d Infantry, attacks on our right. The 3d Battalion
 of our regiment is in regimental reserve. The 2d Machine Gun Battalion (less Company A) neutralizes the woods just south of Merritt Lake. The light mortar platoon (less 2 sections) will cover the eastern slopes of South Merritt Hill. The one-pounder platoon (less 2 sections) will be ready to destroy any enemy machine guns that may be located.
- 2. (a) This battalion, reinforced by Company A, 2d Machine Gun Battalion, 1 section Stokes mortars, and 1 section one-pounders, will attack the enemy positions north and south of Corral Creek and will co-operate with the 1st Battalion in the capture of South Merritt Hill within our own zone.

(b) The leading wave of this battalion will pass that road (indicating country road just south of their position) at 2:00 PM. Zone of action:

Teast boundary, road junction C (indicating point 348.9—747.2) (pointing it out on map).

West boundary, center of target butts just south of point marked "D" on map (indicating)—eastern edge of U.S. Penitentiary (pointing it out).

3. (a) Company A, as the right assault company, is the base company and will deploy for the jump-off with its right resting at

point "D" on map (pointing it out) at D and will attack on a 250-yard front. Direction of advance 166° magnetic.

(b) Company B, as the left assault company, will deploy for the jump-off in this cemetery with its left resting at the eastern corner of this cemetery (pointing it out) and will attack

on a 250-yard front. Direction of advance 166° magnetic.

(c) Company C as right reserve company, and Company D as left reserve company will form for the attack in woods north of road (pointing) in rear of the assault companies. The advance of these companies will be regulated by me.

(d) Company A. 2d Machine Gun Battalion, will go into a first firing position in the edge of those woods (pointing) and will support the advance of the assault companies.

support the advance of the assault companies.

(e) The light mortar section, from a position near point "D" on map (indicating), will sweep the Corral Creek ravine in our front.

(f) The one-pounder section, from a position just west of this point, will hold itself in readiness to destroy instantly any

enemy machine guns that may be located.

(g) A combat patrol consisting of one squad from Company D will protect the left flank of the battalion. A combat patrol consisting of one squad from Company C will protect the right flank of the battalion.

(h) The pioneer platoon (less 1 section) will assist the auxiliary

weapons in crossing Corral Creek.

(a) Station for slightly wounded: Shroeders (347.3—752.9).
(b) Battalion aid station in woods just north of battalion command post in readiness to cover the battalion advance.

(c) Combat wagons, after having issued extra ammunition, will go to ammunition distributing station—point (349.5—751.7). They will refill and return to a position in woods just north of battalion headquarters.

(d) Rolling kitchens will remain in their present positions. 1st section, pioneer platoon, will assist the auxiliary weapons in

crossing Corral Creek.

Battalion command post there (indicating position) at western corner of National Cemetery.
 The official time is 12:55 PM.

Requirements:

- 1. Organization of the command post of Major F, commanding 1st Battalion, 2d Infantry, including all lines of communication established to and from same.
- 2. Organization of the command post (including all lines of communication) of Company A (the right assault company).

Time allowed: Thirty minutes. Discussion of solution.

An Approved Solution

Prepared by Colonel Robert O. Van Horn, Infantry

Major Owen S. Albright, Signal Corps

(NOTE:—All locations mentioned being pointed out definitely on the ground.)

PART I

Map: Leavenworth 3-inch.

First Requirement:

Organization

1. Forward communication center and brigade observation post established at northeast corner of National Cemetery.

Command post at "clothing depot" as stated in the field order. (Artillery regimental command post established in "commissary" building, close vicinity.)

2. At brigade command post:

COMMAND GROUP

- 1 brigade adjutant in room, southeast corner of basement of clothing depot.
- 1 captain, G3, în room, southeast corner of basement of clothing depot.
- 1 sergeant major in room, southeast corner of basement of clothing depot.
- 1 captain, signal officer, in room, southeast corner of basement of clothing depot.

SIGNAL PLATOON, HEADQUARTERS GROUP

- 1 lieutenant, signal platoon commander, in northwest corner of basement, clothing depot.
- 1 sergeant, signal platoon sergeant, in northwest corner of basement, clothing depot.
- 1 sergeant, signal supply sergeant, in northwest corner of basement, clothing depot.
- 2 privates, signal platoon, chauffeurs, in rear clothing depot.

TELEPHONE GROUP

- 1 sergeant, telephone, in northeast corner basement clothing depot.
- 1 sergeant, switchboard, in northeast corner basement clothing depot.
- 1 corporal, switchboard, in northeast corner basement clothing depot.

- 3 privates, switchboard, in northeast corner basement clothing depot
- 1 corporal out on work.

8 privates out on work.

MESSAGE CENTER AND COURIER GROUP

Record Section

- 1 sergeant, chief message center, in northeast corner first floor, clothing depot.
- 3 privates, message center, in northeast corner first floor, clothing depot.

Courier Section

- sergeant, mounted, in charge, in rear of clothing depot.
 privates, mounted, in charge, in rear of clothing depot.
 privates, motorcycle couriers, in rear of clothing depot.
 privates, dismounted, in rear of clothing depot.
 privates, pigeon men (not employed), in rear of clothing depot.

RADIO GROUP

- 1 sergeant, radio, in gun shed in rear of clothing depot, west end. 1 corporal, radio to division, in gun shed in rear of clothing depot,
- west end. 3 privates, radio to division, in gun shed in rear of clothing depot, west end.
- 1 corporal, radio to regiments, in gun shed in rear of clothing depot, west end.
- 3 privates, radio to regiments, in gun shed in rear of clothing depot, west end.

PANEL GROUP

- 2 privates, panel men, in front of clothing depot in fox hole.
- 3. At brigade observation post:

COMMAND GROUP

- Brigade commander, behind east corner of cemetery wall.
- 1 captain, G2, behind east corner of cemetery wall.
- 1 lieutenant, aide, behind east corner of cemetery wall.
- 1 sergeant, mounted orderly, in woods north of road.
 1 corporal, message center clerk, with brigade commander.

COURIER GROUP

- 2 privates, motorcycle messengers, about 30 yards in rear of brigade commander.
- 2 privates, runners, about 30 yards in rear of brigade commander.

TELEPHONE GROUP

- 1 corporal, behind bandstand (operating switchboard).
- 2 privates, behind bandstand.

MACHINE GUN GROUP

- 1 brigade machine gun officer with brigade commander.
- 1 corporal with brigade courier group.
- 3 privates with brigade courier group.
- 8 privates on communication work to machine gun companies.

ARTILLERY GROUP

Artillery regimental commander to right of brigade commander. Artillery reconnaissance officer to right of brigade commander.

Artillery intelligence officer to right of brigade commander. 1 sergeant, scout, in rear of artillery commander.
1 private, bicycle messenger, in rear of artillery commander.
2 privates, scouts, mounted, in woods north of road.
2 privates, telephone, with artillery commander.

Second Requirement:

Lines of Communication

Couriers from brigade message center:

To division command post.
To brigade observation post.
To observation posts of 1st and 2d Infantry and 1st Light

To observation posts of 1st and 2d Infantry and 1st Light
Artillery.
From brigade observation:
To brigade command post.
To command posts of 1st and 2d Infantry.

Radio from brigade command post:
To division command post.
To command posts of 1st and 2d Infantry.

Telephones from brigade command post:
To brigade observation post.
To command posts of 1st and 2d Infantry, through switch-board at forward communication center which is now the brigade observation post and also an advanced brigade command post.

brigade command post. From brigade observation post:

To command posts of brigade, 1st and 2d Infantry. Panels from command post of brigade to airplane.

(NOTE: -All locations mentioned being pointed out definitely on the ground.)

PART II

Map: Leavenworth 3-inch.

First Requirement:

Organization

1. At regimental command post.

COMMAND GROUP

1 lieutenant colonel, in superintendent's house.

operations officer, in superintendent's house.

lieutenant, regimental signal officer, in superintendent's house.

color sergeants, in superintendent's house.

corporal, clerk, in superintendent's house.

SIGNAL PLATOON, HEADQUARTERS GROUP

1 lieutenant, assistant signal officer, out on work.

1 sergeant, platoon sergeant, out on work. 1 sergeant, supply sergeant, out on work.

TELEPHONE GROUP

- 1 sergeant, telephone, behind cemetery wall in rear of superinten-
- dent's house, waiting to move forward.

 1 corporal, telephone switchboard detail, behind cemetery wall in rear of superintendent's house, waiting to move forward. 3 privates, telephone switchboard detail, behind cemetery wall in
- rear of superintendent's house, waiting to move forward.
 *2 corporals, wire construction detail, out on lines.
- *8 privates, wire construction detail, out on lines.
 *1 corporal, telegraph, not employed.
- *1 private, telegraph, not employed.
- *No regimental switchboard established, the brigade's forward board being used as such and regimental lines run from it.

MESSAGE CENTER AND COURIER GROUP

Record Section

- 1 sergeant, chief message center, in basement of superintendent's house.
- 1 corporal, message center, clerks, etc., in basement of superintendent's house.
- 3 privates, message center, clerks, etc., in basement of superintendent's house.

Courier Section

- 1 sergeant, mounted, in charge, in rear of superintendent's building, horses in woods north of road.
- 5 privates, mounted couriers, in rear of superintendent's building, horses in woods north of road.
- 2 privates, motorcycle couriers, in rear of superintendent's build-
- ing, horses in woods north of road.

 3 privates, bicycle couriers, in rear of superintendent's building, horses in woods north of road.
- 4 privates, runners.
- 2 privates, pigeon men, not employed.

RADIO GROUP

- *1 sergeant, radio.
- *1 corporal, radio to brigade.
- *3 privates, radio to brigade. *1 corporal, radio to battalion.
- *2 privates, radio to battalion.
- *Behind cemetery wall in rear of superintendent's house just west of caretaker's building.

VISUAL SIGNAL AND PYROTECHNIC GROUP

- †1 corporal, visual signalling, and pyrotechnic observers and firers. †3 privates, visual signalling, and pyrotechnic observers and firers.
- †Edge of woods east of superintendent's house.

PANEL GROUP

- 2 privates, panel men, between east corner of cemetery wall and
- 2. At regimental observation posts. (Same location as observation post.)

COMMAND GROUP

Regimental commander, with brigade commander. Regimental adjutant, with regimental commander. 2 privates, runners, with brigade courier group.

Second Requirement:

Lines of Communication

Couriers from regimental message center:

To brigade command post.

To battalion command posts.
To light artillery battalion command post. To command post of adjacent regiment.

Radio from regimental command post:

To brigade command post.

To battalion command posts. To command post 1st Infantry.

Telephones from regimental command post:
To brigade command post, through brigade observation post.

To battalion command posts, through brigade observation

post central.

Panels from regimental command post to airplane.

Visual signalling from regimental command post to 2d Battalion, a regimental receiving station to be established on Engineer Hill, to be used when the battalion command posts move forward.

Pyrotechnics as ordered in the "Plan of Signal Communications" which is in force.

tions" which is in force.

(NOTE:-All locations mentioned being pointed out definitely on the ground.)

PART III

Map: Leavenworth 3-inch.

First Requirement:

1. Organization at battalion command post:

COMMAND GROUP

1 adjutant, in west corner cemetery wall.

1 sergeant, chief of signal detachment, in west corner cemetery wall.

Message Center and Courier Group

Record Section

1 corporal, message center records, to left of adjutant. 1 private, message center records, to left of adjutant.

Courier Section

1 corporal, in charge.

1 private, mounted courier, in road west of wall.
1 private, bicycle courier, in road west of wall.

8 privates, runners, in road west of wall.
2 privates, runners from Stokes and one-pounder sections, in road west of wall.

2 privates, pigeon men, not employed, in road west of wall.

TELEPHONE GROUP

- 1 sergeant, assistant chief signal detachment, to left of message
- 1 corporal, telephone switchboard, to left of message center.
 3 privates, telephone switchboard, to left of message center.
 1 telephone switchboard, to left of message center.
 4 privates, line construction, out on work.
 2 privates, telegraph men, not employed, to left of message center.

RADIO GROUP

- 1 corporal, with radio set, to left of switchboard. 2 privates, with radio set, to left of switchboard.
- 2. Organization at battalion observation post:

COMMAND GROUP

Battalion commander, at east end of target butts.

- 1 sergeant major, at east end of target butts.
- 2 privates, runners, at east end of target butts. 1 corporal, mounted orderly, at east end of target butts.

TELEPHONE GROUP

- 1 corporal, in range house at target butts.
- 1 private, in range house at target butts.

VISUAL SIGNALLING AND PYROTECHNIC GROUP

3 privates, on east end of target butts.

PANEL GROUP

- 2 privates, in front of east end of target butts.
- 3. Lines of communication from battalion command post:

Couriers from battalion command post:

- To regimental command post.
- To company command posts.
- To command post of supporting artillery battalion. To Stokes and one-pounder sections.

- To machine gun company.
 To command posts of adjacent battalions.
 Radio from battalion command post:

- To regimental command post.

 To command posts of 2d and 3d Battalions.

 Telephones from battalion command post:
- - To regimental command post.
 To command post of supporting artillery battalion.
 To battalion observation post.
- 4. Lines of communication from battalion observation post:

Couriers from battalion observation post:

- To battalion command post.
 To companies (limited).
 Telephone from battalion observation post:
 To battalion command post.
 Through battalion command post by all lines connected to command post switchboard.

Panels from battalion observation post:
To airplane.
Visual signalling at battalion observation post:
From companies to regimental signal station on Engineer
Hill when battalion command post advances.
Pyrotechnics from battalion observation post, as ordered in the "Plan of Signal Communications" at present in force.

- 5. Organization at company command post as discussed on the ground:
 - 6. Lines of communication at company command posts:

Courier from company command post:

To battalion command post.

To adjacent companies.

To platoons.

To supporting weapons.

Visual signalling from company command post:

To battalion command post.

To platoons.

Pyrotechnics from company command post.

Pyrotechnics from company command post, as ordered in "Plan of Signal Communications" at present in force.

The School of the Line 1920-1921

TACTICAL RIDE No. 8

(TT 36)

October 13, 1920

Artillery Reconnaissance, Selection of Positions and Computation of Firing Data

Prepared by
Major Pelham D. Glassford,
Field Artillery

Maps: Fort Leavenworth and Vicinity, 3"=1 mile.

Special battle map prepared for this exercise (omitted).

General Situation:

A hostile Missouri (Red) division crossing at Kansas City raided in Kansas (Blue territory) as far as the vicinity of Kickapoo where on October 12 it engaged the Blue 1st Division, General A, commanding, and was stopped with severe loss.

During the night of October 12-13 the Red force withdrew toward the south, General A following in two parallel columns in close pursuit.

Special Situation (Blue):

At 8:00 AM, October 13, General A's force is disposed as follows: The left column, composed of the 1st Brigade (General B, commanding), with the 1st Light Artillery attached, marching on the 17—15—9—5—Fort Leavenworth road; 1st Infantry (less one battalion) and Battery A, 1st Light Artillery, advance guard; main body in the following order of march, following the advance guard at 600 yards:

Headquarters, 1st Brigade.
Detachment from headquarters, 1st Light Artillery.
One battalion, 1st Infantry.
Detachment from headquarters, 1st Battalion, 1st Light Artillery.

Part of battery details, Batteries B and C.
2d Machine Gun Battalion.
1st Battalion, 1st Light Artillery (less Battery A, and combat trains).
Detachment from headquarters, 2d Battalion, 1st Light Artillery.
Part of battery details, 2d Battalion, 1st Light Artillery.
2d Infantry.
2d Battalion, 1st Light Artillery (less combat trains).
Combat trains, 1st Light Artillery (less combat train of Battery A).
Attached sanitary troops, etc.

The right column, composed of the 2d Brigade with 2d Light Artillery attached, is marching on the road from Kickapoo through 17 towards Frenchmans, and at 8:00 AM the head of this column has reached the Taylor Farm. Other units of the division in rear of this column and near Kickapoo.

Division message center at Taylor S. H.

General B, riding about one-half mile ahead of the main body of the 1st Brigade, has reached the southwest corner of the Disciplinary Barracks at 8:00 AM, where he is informed that his advance guard has been checked on an east and west line through Engineer Hill by heavy fire of all arms from the high ground just north of Leavenworth; enemy's force estimated to be at least one regiment of infantry and one battalion of light artillery. General B decides to attack at once the enemy north of Leavenworth, with both regiments in line; boundary between regiments: Prison Lane; 1st Infantry on the left with two battalions in line, 2d Infantry on the right with one battalion in line.

Situation Relative to the Commanding Officer, 1st Light Artillery

The command post and message center of General B are established in a building at the northeast corner of the West End Parade. The regimental command post and message center of the 1st Light Artillery are established in a building nearby. The artillery regimental commander has moved forward with General B to the northeast corner of the National Cemetery wall, where he has established a "forward communication center" and personal observation post. He directs his telephone officer to lay two lines between this point and his message center (a switchboard is established at each of these stations).

Situation Relative to the 2d Battalion, 1st Light Artillery

Hearing the sound of battle to the south, Major E, commanding this battalion, has ridden ahead along the column accompanying the commanding officer, 2d Infantry, and at 8:30 AM has arrived at the southwest corner of the Disciplinary Barracks, from which point the main body is turning east toward Pope Hall, and thence south on Grant Avenue. Following Major E at a short distance are the following members of his headquarters:

> Reconnaissance officer. Information officer. Telephone officer.

3 orderlies.

3 scouts.

4 agents (one from each battery and one from the combat train).

His adjutant, sergeant major, four other scouts, instrument detail, and telephone detail with reel cart, have remained in column behind the 1st Battalion, 1st Light Artillery. As there can be no immediate use for the radio detail in this situation, it is marching with the combat trains.

As Major E follows the commanding officer, 2d Infantry, in the direction of General B's command post, he directs the reconnaissance officer to mark the route for the remainder of his battalion headquarters.

Arriving in the vicinity of post headquarters, he sees Battery A in action in the hollow near the tennis courts.

At the brigade command post, the commanding officer, 2d Infantry, receives word from General B relative to his decision to attack at once, and his intention to employ the 2d Infantry to envelop the enemy's left via Atchison Cross. Major E is under orders to support the 2d Infantry, and the colonel of this regiment requests Major E to give him aggressive artillery support with battery positions well advanced, and to join him after making his reconnaissance in the vicinity of the National Cemetery. It is known that the 1st Infantry has reached a line through Merritt and Custer Hills (see special map), but is apparently held on this line. At 8:45 AM Major E starts on his reconnaissance.

Required:

- 1. Major E's reconnaissance and selection of positions, in detail.
- 2. The computation of firing data from a battery observation post on Engineer Hill.

OUTLINE OF A SOLUTION

- 1. What has become of the battalion information officer?
- 2. In what general direction does Major E pursue his reconnaissance?
- 3. How hoes he employ other members of his headquarters to assist him in making this reconnaissance, or does he make the reconnaissance entirely himself?
- 4. Is it better for Major E to select *suitable* positions for his batteries before they arrive, or to take more time and select the *very best* positions available, if necessary keeping the batteries waiting for his reconnaissance?
- 5. In selecting positions, is Major E confined to ground west of the boundary between infantry regiments?
- 6. The position for Battery D being the first selected (position shown on special map), what do you presume to be the place of Battery D in the battalion column?
- 7. Having selected this position, by what means of communication does he inform the battery commander?
- 8. What information and orders does he transmit to the commanding officer, Battery D?
- 9. What are the advantages and disadvantages of the position selected for Battery D? And is this position suitable for carrying out the missions that have been assigned or that may be anticipated?
- 10. Where would the battery commander go to secure observation for the conduct of fire, and what communications would be establish?
- 11. What is the least range for shrapnel with zero angle of site in the direction of the Federal Penitentiary?
- 12. After selecting this position for Battery D, in what direction will Major E proceed with his reconnaissance, and what disposition will he make of the members of his head-quarters accompaning him during his reconnaissance?

The class will now move forward individually to select one other battery position, and will assemble by section on Engineer Hill in 20 minutes. Mark the position selected on the special map.

Discussion of the positions selected:

- (a) Advantages and disadvantages.
- (b) Field of fire.
- (c) Least range with high explosive shell, short fuse.
- (d) Battery observation.
- (e) Battery communications.
- 13. Where will Major E establish the battalion combat train, and how will be communicate therewith?
- 14. Will Major E establish a battalion aid station, and if so, where? Assuming the battalion surgeon to be with the combat train, how will he communicate with him?
- 15. What reconnaissance will Major E require west of the cemetery?
- 16. While at the northeast corner of the cemetery, Major E learns that the commanding officer, 2d Infantry, has established his command post somewhere south of the cemetery. Major E rides in that direction and finds the commanding officer, 2d Infantry, established at Target House No. 8 (348.4—749.7 on special map). The reconnaissance officer reports to him at this point and informs him that there are no good battery positions in the woods, but that the road west of the cemetery affords an excellent route of advance. The 2d Infantry is beginning to reinforce the 1st Infantry on its right. Battery D is going into position. All indications point to a weak resistance upon the part of the enemy. Major E decides to keep the third battery of his battalion "in readiness" on the road west of the cemetery and somewhat north thereof. The commanding officer, 2d Infantry, suggests to Major E that he place two guns of this battery in position for direct fire three or four hundred yards west of his command post, and in the edge of the woods. What action would Major E take on this suggestion?
- 17. In what vicinity would Major E establish his command post?
- 18. What communications would be established by the signal detail of the battalion?
- 19. What provision would be made for communication with the front line battalion of the 2d Infantry?

20. Assuming that no code of pyrotechnic signals had been published by the division, what signals would you deem necessary in this situation for communication between the infantry front line and the supporting artillery battalion? Where and by whom would these signals be fired?

CALCULATION OF FIRING DATA

Exercises with instruments and with the battle map on Engineer Hill.

Determining the deflection:

(a) Parallel method.

(b) By reciprocal laying.(c) By measurement on the map.

Determining the range:

(a) By estimation.

(b) With the range finder.

(c) By measurement on the battle map.

Determining the site:

(a) By measurement from map contours.

(b) By calculation from instrumental measurements.

Answers to Questions Given in "Outline of Solution"

Prepared by Major Pelijam D. Glassford, Field Artillery

1. What has become of the battalion information officer?

Answer: He and his orderly have accompanied the commanding officer, 2d Infantry.

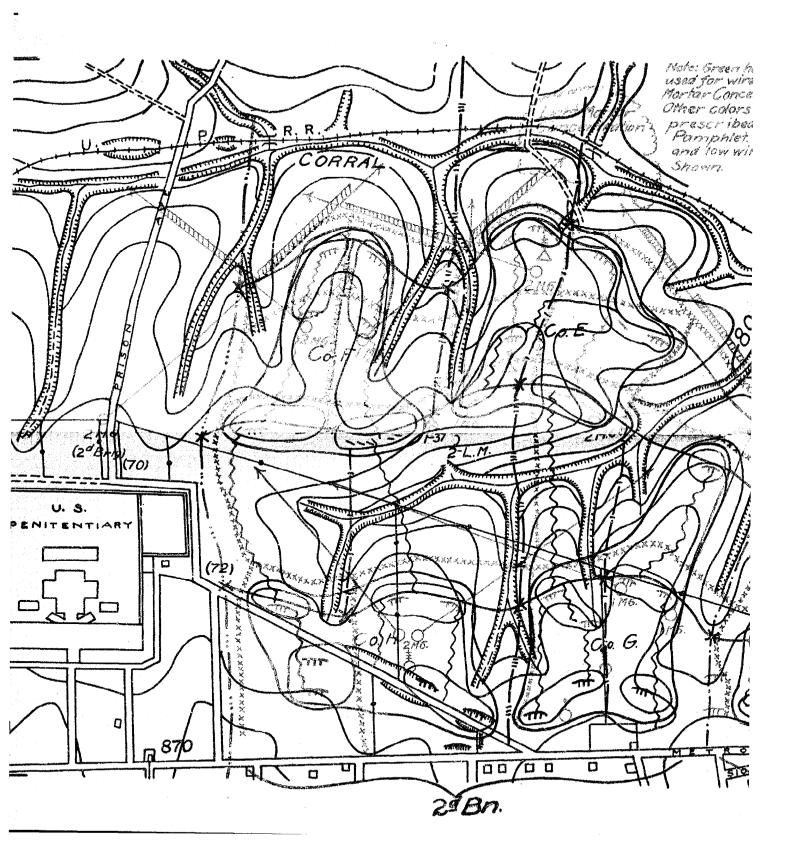
2. In what general direction does Major E pursue his reconnaissance?

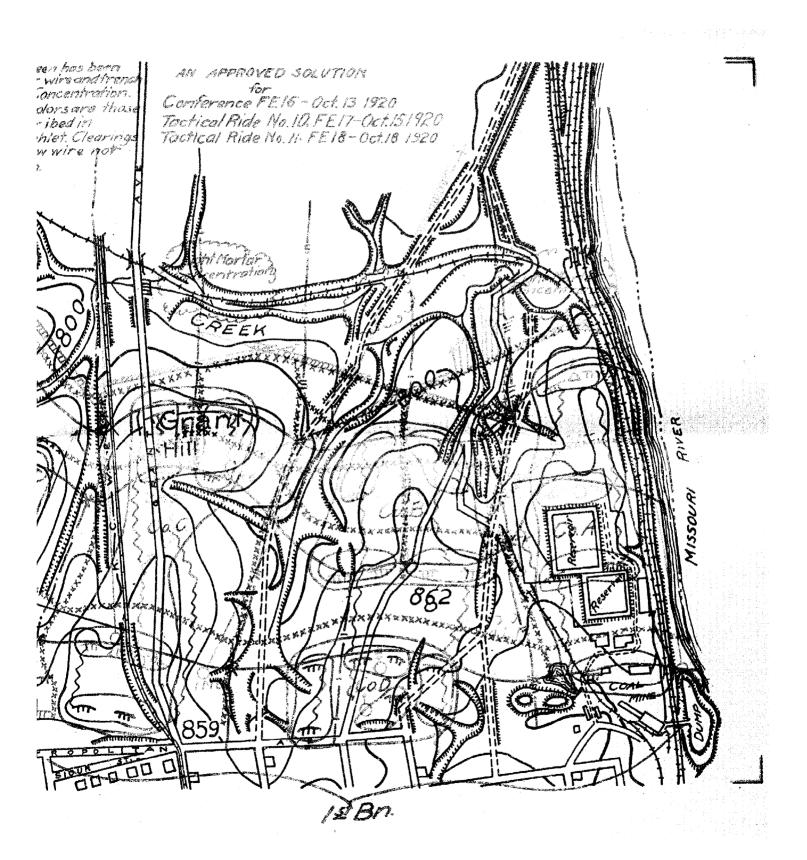
Answer: Along the north edge of West End Parade and thence toward the National Cemetery.

3. How does he employ other members of his headquarters to assist him in making this reconnaissance, or does he make the reconnaissance entirely himself?

Answer: He will send his reconnaissance officer and scouts to reconnoiter on either or both flanks of his own personal reconnaissance. In this situation to the west.

4. Is it better for Major E to select suitable positions for his batteries before they arrive, or to take more time





and select the *very best* positions available, if necessary keeping the batteries waiting for his reconnaissance?

Answer: As a general principle in a moving situation, the artillery must be prompt in getting into position, and must be ready to open fire at the earliest possible moment. The selection of *suitable* positions should therefore be made in sufficient time to permit firing data to be calculated and communications to be established before the batteries arrive at the positions selected.

5. In selecting positions, is Major E confined to ground west of the boundary between infantry regiments (Prison Lane)?

Answer: As a general rule this is desirable, but is hardly possible in this situation. There is no objection to taking a position within the sector of another unit, if there is no interference with other troops. As a general rule permission should be obtained; in this case from the artillery regimental commander.

6. The position for Battery D being the first selected (position shown on special map), what do you presume to be the place of Battery D in the battalion column?

Answer: The leading battery in the column.

7. Having selected this position, by what means of communication does he inform the battery commander?

Answer: Verbally by means of the battery agent.

8. What information and orders does he transmit to the commanding officer, Battery D?

Answer: Battery position to be occupied, and manner of approach.

Direction of fire.

Reference point or base point.

Sector of fire.

Information relative to the enemy and our own troops. Targets to be fired upon at once, if any, or other in-

structions relative to opening fire.

Communications to be established other than within

the battery, if any.

Location of the battalion command post.

9. What are the advantages and disadvantages of the position selected for Battery D? And is this position suitable for carrying out the missions that have been assigned or that may be anticipated?

Answer:

Advantages:

(a) Excellent field of fire.

(b) Effective ranges to enemy positions.

- (c) Easy to get in and out of, and to supply with ammunition.
- (d) Fair concealment.

Disadvantages:

(e) Battery commander must go a long distance to secure good observation.

The position seems adequate to carry out all possible missions.

10. Where would the battery commander go to secure observation for the conduct of fire, and what communication would be establish?

Answer: The battery commander would go to the vicinity of Engineer Hill to secure observation. He would lay a telephone line between the battery and the observation post selected. As the distance to the regimental command post is very short, he would run a line into the regimental switchboard.

11. What is the least range for shrapnel with zero angle of site in the direction of the Federal Penitentiary?

Answer: One thousand nine hundred and fifty meters.

12. After selecting this position for Battery D, in what direction will Major E proceed with his reconnaissance, and what disposition will he make of the members of his headquarters accompanying him during his reconnaissance?

Answer: He will proceed toward the cemetery along the north and south line of trees on West End Parade. He would have an orderly accompany him and perhaps his reconnaissance officer. He would require the other members of his headquarters to keep abreast of him under cover of the trees to the west.

13. Where will Major E establish the battalion combat train, and how will be communicate therewith?

Answer: He would require his combat train commander to select a suitable location several hundred yards north of Battery D's position, and report the location to him and to the battery commanders. He would communicate with the combat train commander by means of the combat train agent.

14. Will Major E establish a battalion aid station, and if so, where? Assuming the battalion surgeon to be with the combat train, how will be communicate with him?

Answer: He would establish a battalion aid station. A suitable location would be in one of the buildings back of Battery D's position. He would communicate with the battalion surgeon through the combat train agent.

15. What reconnaissance will Major E require west of the cemetery?

Answer: A reconnaissance for battery positions and roads that might be used for advance or withdrawal. He would send out scouts to insure the right flank of his positions against surprise until adequately protected by the infantry.

16. While at the northeast corner of the cemetery, Major E learns that the commanding officer, 2d Infantry, has established his command post somewhere south of the cemetery. Major E rides in that direction and finds the commanding officer, 2d Infantry, established at Target House No. 8 (348.4—749.7 on special map). The reconnaissance officer reports to him at this point and informs him that there are no good battery positions in the woods, but that the road west of the cemetery affords an excellent route of advance. The 2d Infantry is beginning to re-enforce the 1st Infantry on its right. Battery D is going into position. All indications point to a weak resistance upon the part of the enemy. Major E decides to keep the third battery of his battalion "in readiness" on the road west of the cemetery and somewhat north thereof. The commanding officer, 2d Infantry, suggests to Major E that he place two guns of this battery in position for direct fire three or four hundred yards west of his command post, and in the edge of the woods. What action would Major E take on this suggestion?

Answer: In principle, subdividing a battery unless absolutely necessary, is to be avoided. It is believed that the two batteries in position are adequate to meet all the needs of artillery fire within the right sector, so far as the situation has developed, and that the two guns in direct fire positions would be superfluous. It is believed that Major E would advise the infantry colonel against placing these two guns at the present time in the position suggested.

17. In what vicinity would Major E establish his command post?

Answer: In the vicinity of the 2d Infantry regimental command post.

18. What communication would be established by the signal detail of the battalion?

Answer: A telephone line to the regimental switch-board at northeast corner of the cemetery (artillery regimental observation post), and lines to the battery observation posts on Engineer Hill.

19. What provision would be made for communication with the front line battalion of the 2d Infantry?

Answer: The battalion information officer would be given sufficient personnel and equipment to run a telephone line from the battalion command post forward to the front line battalion of the 2d Infantry, extending this line as the battalion advanced. In case of failure of telephone communication visual signalling and pyrotechnics would be resorted to.

20. Assuming that no code of pyrotechnic signals had been published by the division, what signals would you deem necessary in this situation for communication between the infantry front line and the supporting artillery battalion? Where and by whom would these signals be fired?

Answer: Artillery fire falling short.

We are ready to advance, increase the range of artillery fire.

These pyrotechnic signals would be fired by prior arrangement from successive rocket post decided upon in advance. They would be fired by members of the artillery information detail, upon request of the commanding officer of the front line battalion, 2d Infantry, or as a relay of these pyrotechnic signals fired by the infantry companies of the front line battalion.

THE GENERAL SERVICE SCHOOLS

The School of the Line 1920-1921

TACTICAL RIDE No. 9

Artillery Battalion in Attack of Prepared Position and Pursuit

T. T. 39

October 14, 1920

Prepared by Lieutenant Colonel M. E. Locke, Field Artillery

PART I

Map: Leavenworth 3".

Leavenworth-Easton Sheets.

General Situation:

An invading Blue army has forced a passage of the Missouri River near Leavenworth and holds the line of heights: Kickapoo-Plum Hill-Sheridan Drive-Sentinel Hill-Hund Hill and the continuing high ground east of It is opposed by a Red force holding the Salt Creek. heights hill (344.2-757.0)—Crook Point and the continuing high ground west of Salt Creek. The situation has stabilized and both sides have fortified their positions. North of the U. P. R. R. the front lines confront each other in Salt Creek Valley west of the creek.

Special Situation (Blue):

The Blue army having been reinforced has prepared for a general attack. H hour is 6:00 AM, 14 October, 1920.

Zones of action:

2d Division:

North Boundary, Grid Line 754.0, exclusive. South Boundary, Grid Line 752.0, inclusive.

3d Brigade:

North Boundary, north boundary of division. South Boundary, Millwood Road, inclusive. Boundary between regiments of brigade-Shafer's House J. Aaron's—hill 1029.

The 1st and 3d Divisions are on the right and left, respectively, of the 2d Division.

The division attacks with brigades abreast, each brigade with regiments abreast in column of battalions. In the 3d Brigade the 5th Infantry is on the right and the 6th Infantry on the left.

Jump-off line of infantry is 346.2—754.0—Daniels House—Taylors House (345.6—752.1).

The 4th Light Artillery supports the attack of the 3d Brigade. The 1st Battalion supports the 5th Infantry and the 2d Battalion the 6th Infantry.

The afternoon, 11 October, the Commanding Officer, 4th Light Artillery, in conference with his majors, has given them the foregoing information and the following additional instructions:

Reconnoiter and select positions for your battalions, the same to be completed by daylight tomorrow. Orders for occupation, schemes of fire and barrage charts will be issued later. My command post will be at the Shafer House. Select positions for your limbers and combat trains to insure prompt forward move after attack has progressed. Furnish me on map tracing your dispositions when completed. Ammunition distributing station is at U. S. M. P. quarry (349.3—752.6).

Special instructions for Major K (Commanding Officer, 2d Battalion):

The area between grid lines 754.0 and 753.0 extending east from Salt Creek to a true north and south line 500 yards east of Shafer's is available for your battalion.

Required:

Major K's location of batteries, battalion observation post, command post, limbers and combat train.

Time allowed: Twenty minutes.

Discussion-Approved solution pointed out on the ground.

PART II

Special Situation:

The attack is successful all along the line. At 10:00 AM, the Commanding Officer, 2d Battalion 4th Light Artillery, receives at his command post the following telephone message from his regimental commander:

"The attack is generally successful. Infantry of our division have the heights in our front. The enemy is withdrawing. Commanding Officer, 6th Infantry, has moved to road junction

342.9—752.9. Move your battalion at once west on Millwood Road and support his regiment in pursuit. The 1st Battalion takes over your present fire missions. Have your combat train follow battalion."

PART II

Required:

Orders of Commanding Officer, 2d Battalion 4th Light Artillery.

Time allowed: Ten minutes.

Discussion.

An Approved Solution to Part II

Telephone message to all battery commanders. Writ- 10:05 AM ten copy by agent to Commanding Officer, Combat Train:

"The attack is generally successful. The enemy is withdrawing. Our infantry hold the heights in our front. The Commanding Officer, 6th Infantry, has moved to road junction 342.9—742.9

742.9.

"This battalion moves at once to support the 6th Infantry in pursuit. The route is west on Millwood Road to position of 'Last Marker.' Route is generally covered after passing Taylor School House

School House.

"Batteries march in the order D, E and F. Move at the trot where ground permits. All vehicles cross Salt Creek Bridge at the walk

the walk.

"Combat train follows Battery F. The Commanding Officer, Combat Train, will reconnoiter and select position for train near M. Schwartz (344.2—752.8). Location ammunition distributing station—no change. I will mark the route. Captains push forward with battery details to position of last marker after batteries take the road. I move at once (with detail) to join the Commanding Officer, 6th Infantry.

"Your present fire missions now taken over by 1st Battalion. Cease firing. March order."

PART III

Special Situation:

On arrival at road junction 342.9—752.9 Major K is informed by the Commanding Officer, 6th Infantry, that his regiment now has two battalions in the front line along the east slopes of the high ground east of J. Kemotor (341.3—752.9); that the 1st Battalion is north and the 2d Battalion south of the Millwood Road, he having extended his line to the south to fill a gap due to the slower advance of the brigade on his left; that the enemy with machine guns is still offering some resistance from the east

edge of the orchard north of house (340.7—752.4); that in the vicinity of hill 1047 (342.4—752.7) a good view can be had; that the Atchison Pike west of the orchard is being used by the retreating enemy; that the line of the pike is well marked by the telephone poles; and that he requests fire on the orchard and on enemy on the pike.

PART III

Required:

Statement of Major K's actions to meet this request. Time allowed: Fifteen minutes. Discussion.

An Approved Solution to Part III

As Major K rode west, he left his radio officer as "Last Marker" at road junction 344.60-752.9 with orders for the batteries to halt there, clearing the road and for battery commanders and their details to continue on to 342.9-752.9, where at 10:45 AM, after hearing the remarks of Commanding Officer, 6th Infantry, he moves with his detail to hill 1047 (342.4-752.7) marking the route as he goes. He keeps his detail under cover of the corn and with his adjutant and telephone officer reconnoiters from the cover of the large straw stack. Positions for fulfillment of his mission are in his immediate vicinity. The orchard can be plainly seen, and stretches of the Atchison Pike are shown by the telephone poles. He decides to put all batteries in position with dismounted defilade; the first battery to take the most southerly position with limbers in the second swale immediately in its rear and to open fire on the orchard; the second battery to take the most northerly position with limbers in the swale directly in its rear and to harass the Atchison Pike west of 340.7—752.4 (house) with shrapnel; the third battery to be posted in the center with mission dependent upon course of the action at the time. He selects the straw stack as his observation post with command post immediately in rear under cover of the corn and assigns two men of the instrument detail to observe the terrain in front. He sends his telephone officer back to where he met the Commanding Officer, 6th Infantry,

with orders for battery commanders to report to him at the observation post, leaving their details under cover with the battalion detail. The telephone officer is to lay a wire between him and the Commanding Officer, 6th Infantry, at once. On arrival the battalion surgeon is to be directed to select a dressing station.

He instructs the adjutant to send scouts to the flanks of the battalion and to go with two men to the vicinity of the big water tank to the right front, get a view of the ground there and report back. As battery commanders report to him, he directs them to occupy positions as above decided upon.

THE GENERAL SERVICE SCHOOLS

The School of the Line 1920-1921

Course in Field Engineering TACTICAL RIDE No. 10 (FE 10)

October 15, 1920

TACTICAL RIDE No. 11

(FE 11)

October 18, 1920

Organization of the Ground for a Center of Resistance and Strong Points

Prepared by
Major Lewis H. Watkins,
Engineers

PART I

Solved as a Map Problem in Conference Room (FE 16) October 13, 1920.

Maps: Fort Leavenworth and Vicinity, 3-inch, and Sheets H-9 and H-10, 12-inch.

NOTE:—The class will read over the situations and requirements and the work charts and become familiar with same. All requirements for Part I will be solved at the conference.

General Situation:

A Blue corps is advancing from the south on Leavenworth. The advance guard of the Blue corps holds Fort Leavenworth—Wagners Point—Sentinel Hill, and is being heavily attacked by a Red corps.

Special Situation (Blue):

You are Major A, commanding the 1st Battalion, 1st Infantry, and at 1:00 PM today Colonel A, 1st Infantry,

issues the following verbal orders to the commanding officers of the units of his regiment on the hill near northern exit of Leavenworth and just west of Grant Avenue:

"There is no further information of the enemy.

"Our advance guard expects to withdraw to the south through

Leavenworth about 6:00 PM today.

"The 1st Division will organize for defense and hold the position with main line of resistance along hills and ridges just south of Corral Creek and extending from Missouri River on the right to Southwest Hill, inclusive, on the left; the 1st Brigade on the right, the 2d Brigade on the left. The 2d Infantry will be in 1st Brigade reserve.
"The 1st Light Artillery will support the 1st Infantry. The

Light Artillery will cover the division front.
"The 1st Machine Gun Battalion (less 2 companies) and 1 company, 3d Machine Gun Battalion, will support the 1st Infantry with overhead fire from positions near our regimental reserve line.

"The 1st Infantry, with Company A and Company B, 1st Machine Gun Battalion attached, will organize for defense and hold the main battle position of the 1st Brigade sector: Right boundary, Missouri River; left boundary, Prison Lane—U. S. Penitentiary-road running south from east edge of penitentiary,

all exclusive.
"The 1st Battalion with machine gun company, 1st Infantry, and two sections of one 37-mm. gun and two light mortars each will hold the right of the sector: Left end of firing line, point on electric railway northwest of Grant Hill; left end of battalion reserve line, including this hill (where order is issued) to a point 200 yards west of Grant Avenue.

"The 2d Battalion with Company A, 1st Machine Gun Battalion, and one section of one 37-mm. guns and two light mortars attached, will hold the left of the sector: Firing line, from left of 1st Battalion line to a point in ravine, exclusive, 400 yards north of northeast corner of penitentiary, battalion reserve line, left of 1st Battalion line to northeast corner of orchard just east

of penitentiary.
"The 3d Battalion and Company B, 1st Machine Gun Battalion, will organize for defense the regimental reserve line following the third street from northern border, inclusive, of Leavenworth from Missouri River on the right to left limit of sector on

"The 1st Battalion and the 2d Battalion will each furnish one section from rifle companies for a connecting group between their battalions. This group will organize for defense a combat group on line between battalion sectors and on ridge near battalion reserve line in such a manner that it can sweep with fire the ravine between battalion sectors; the 2d Battalion will send a ravine between battainon sectors; the 2d Battainon will send a similar detachment to report to a platoon commander from the battalion on its left, at northwest corner of orchard near penitentiary, for duty as connecting group.

"The 1st Battalion will locate two machine guns to cover with flanking fire the front of the 2d Battalion and the north branch of Corral Creek, and two machine guns on its battalion reserve line to guest the president between battalian guestors.

line to sweep the ravine between battalion sectors.

"The 2d Battalion will locate two machine guns to cover with flanking fire the front of the 1st Battalion and Grant Avenue bridge and Corral Creek to the east of said bridge; and two machine guns to cover with flanking fire the front of the center

of resistance on its left. The center of resistance on its left will locate two machine guns north of the penitentiary to cover with flanking fire the left front of the 2d Battalion and sweep the

ravine between battalions.

"The 3d Battalion and Company B, 1st Machine Gun Battalion, will prepare for defense of the regimental reserve line, and be prepared to move to any part of sector for counter-attack. In addition to the above missions, Company B, 1st Machine Gun Battalion, will arrange for two platoons to support with overhead fire the 1st Battalion and one platoon the 2d Battalion. SOS barrages will be given later.

"All positions will be rapidly entrenched and ready to meet attack by 6:00 PM. Only hasty works will be constructed until

in general the following has been provided:

(1) Reasonable field of fire for firing lines.

(2) Squad trenches for all exposed lines.

(3) A single belt of wire covering entire firing line.

(4) Squad trenches on forward slopes, connected laterally within combat groups.

(5) At least one approach trench per platoon from topo-

graphical crest to trenches on forward slopes. (6) One belt of wire covering flanks of strong points of

(7) At least one approach trench per front line company on exposed forward slopes from battalion reserve line to

support line.
"The 3d Battalion will send two companies to clear field of fire in front of right of 1st Battalion from Corral Creek to Pope Hill. Four squads from pioneer platoon and band will report to the 1st Battalion and four to the 2d Battalion.

"Tool wagons from engineer train will arrive in 30 minutes, one wagon each for the 1st Battalion and the 2d Battalion and one wagon for the 3d Battalion and Company B, 1st Machine Gun

Battalion.

"Station for slightly wounded on Seventh Street, 1,200 yards south of here. Regiment aid station on Seventh Street, three blocks south of here. Ammunition wagons will be promptly unloaded, sent south via Seventh Street to refilling station at railway station and return via Sixth Street.
"Telephone communications will be established to companies.

"Regimental command post: School house four blocks south

"Get your troops on their work promptly."

Your battalion marching from the south will arrive at northern exit of Leavenworth at 1:20 PM.

Required:

- 1. Draw on map in pencil, firing line, support line, and battalion reserve line.
- 2. Select natural and artificial strong points along those lines; assign companies to their defense; fix limiting points between companies; and draw in pencil on map lines enclosing strong points, making such adjustments to firing line, support line, and battalion reserve line as may be necessary.

- 3. Locate machine guns, and adjust above lines to secure best result as a whole.
- 4. Draw in blue on map the lines enclosing strong points and centers of resistance; and in red, lines of fire of machine guns, and blue crosses for limiting points on lines.
- 5. Locate light mortars and 37-mm, guns; show in red their lines of fire, and in brown, special areas to be covered by light mortars.
- 6. Locate on map battalion command post, observation station, battalion aid station.
- 7. Draw in pencil on map roughly the priority work required by Colonel A's orders and compute roughly the time that would be required for each unit to complete the work in its sector.
- 8. From the above computations assign units to tasks in such a manner that the best results as a whole will be obtained, following the principle that each unit should as far as practicable do the work within the area of its own strong point.
- 9. From the assignments to strong points and positions, and limiting points on lines, and tasks for work determined above, work out the disposition of units within each strong point; the organization of combat groups; and all priority work required by Colonel A's orders. Draw in blue lines enclosing combat groups.
- 10. Show on map the status of work at 6:00 PM as follows:
 - (a) Work actually started or finished; brown, for wire entanglements, red and blue cross-hatching, for clearings only partly finished, and red, for all other works.

(b) Work planned but not started, blue.

PART II

Staking Out Strong Point on the Ground

Map: Fort Leavenworth and Vicinity, 3-inch.

Situation (Blue):

(Continuation of General and Special Situations and assignments made by Major A to units of his battalion as brought out in Conference FE 16, October 13, 1920.)

Company B, 1st Battalion, 1st Infantry, has been ordered to organize for defense the central front line strong

points with assignments of sector, limiting points of firing line and support line, location and prime mission of supporting weapons, and location of adjacent units as worked out at the conference FE 16, October 13, 1920. A brief summary of this data relating to Company B is as follows:

(a) Company sector:

- 1. Right boundary: Bend in road (350.1—748.2)—intersection of ravine and unimproved road (exclusive) (350.1—747.8)—point in ravine (340.7—749.7).
- Left boundary: Point on railroad (349.7—748.0)—point on road (exclusive) (349.7—747.8)—point on road (exclusive) (349.6—747.6).

(b) Limiting points of firing line:

1. Right, intersection of ravine and unimproved road (exclusive) (350.1—747.8).

2. Left, point on road (exclusive) (349.7-747.8).

(c) Limiting points on support line:

1. Right, point in ravine (350.1-347.5). 2. Left, point on road (exclusive) (349.6-747.6).

(d) Company A on right; Company C on left.
(e) Machine guns supporting Company B:
1. Two machine guns near ravine at 350.2—747.8, firing across Company B's front (through figure 8 of 800foot contour).

2. Two machine guns on reverse slope of Grant Hill, firing across Company B's front (through figure 8 of 800-foot contour).

- 3. One machine gun near right of Company B's support line, covering interval between strong points and gap in belt of flanking machine gun fire where it crosses ravine.
- 4. One machine gun about 100 yards north of intersection of Grant Avenue and Metropolitan Avenue, covering interval between front line strong points and diagonal road extending northeast from interval.
- (f) Four Stokes mortars in rear of right of Company B's support line, covering intersection of ravines in front of Company B; also areas in front of Company A and Company C.
- (g) Two 37-mm. guns near right of Company B's support line.
- (h) Company D has been assigned the task of clearing field of fire in front of Company B and of constructing wire entanglements on Company B's front and flanks.

Required:

- 1. Stake out strong point on the ground showing the following:
 - (a) Location of supporting machine guns and trench mortars and 37-mm. gun by red flags.

(b) Limiting points on firing line and support line by yellow flags.

(c) Command post and observation stations by white flags.

(d) Local aid station by red cross flag. (e) Work actually started or finished by 6:00 PM. by red tape.

- (f) Wire entanglements, including that to be constructed by Company D on Company B's front and flanks, by white tape.
 (g) Work planned but not started by 6:00 PM by yellow tape.
- 2. The class will assemble by sections at 3:30 PM for a discussion of the problem. At this discussion the four officers detailed as commanders and assistants of the company and of each platoon will be prepared to explain to their respective sections the organization of their respective areas, and their estimate on the amount of work started or completed by 6:00 PM.

PART III

Staking Out Center of Resistance on the Ground Map: Fort Leavenworth and Vicinity, 3-inch.

Situation (Blue):

(Continuation general and special situations given in problem for Conference FE 16, October 13, 1920.)

Required:

- 1. Mark out center of resistance organized by the 2d Battalion, 1st Infantry, as follows:
 - (a) Location of all limiting points between companies on firing line, support line, and battalion reserve line by yellow flags. (b) Location of command posts and observation stations by

white flags. (c) Location of machine guns, light mortars and 37-mm. guns by red flags.

- (d) Battalion aid station by red cross flag.
 (e) Work actually started or finished by 6:00 PM, by red tape.
 (f) Wire entanglements by white tape.
 (g) Work planned but not started by 6:00 PM by yellow tape.

NOTE:- Clearings will not be marked but will be explained at inspection of works.

2. The class will assemble by section at 3:30 PM at roadfork on Metropolitan Avenue which leads northwest to U.S. Penitentiary, and make an inspection of the works laid out. At this inspection, officers assigned as commanders of units and assistants will be prepared to explain to their respective sections the plan for organizing for defense

the areas assigned to their respective units, and their estimate of the amount of work accomplished by 6:00 PM.

THE GENERAL SERVICE SCHOOLS

The School of the Line 1920-1921

Course in Tactics and Technique of Separate Arms
TACTICAL RIDE No. 12—Artillery
(TT 49)

October 20, 1920

Prepared by
Major Lesley J. McNair,
Field Artillery

General Situation:

A state of war has existed for some weeks between Kansas (Red) and Missouri (Blue). The Blue forces concentrated in Missouri to the east of Leavenworth and Fort Leavenworth, and early in October effected a crossing at those places, driving back the Red forces and forming a brideghead covering the crossings.

Special Situation (Blue):

In a general attack by the forces of the bridgehead, the 1st Blue Division is to make a deep advance westward which in its early stages is parallel to Atchison Pike. The division attacks with regiments abreast, the line of departure being generally along Salt Creek. The attack is to be supported initially by a rolling barrage.

The 3d Infantry is the third regiment from the right of the 1st Division and has a zone of action with the right (north) boundary parallel to and 400 yards north of Atchison Pike and the left (south) boundary 200 yards south of this road. The regiment attacks in column of battalions, the rear battalion being in division reserve. One accompanying gun has been withdrawn from the artillery supporting the regiment and attached to the assault battalion. The initial command post of the assault battalion is near Wendig farm house (345.9—749.9), and it will be moved

to Flint farm house (344.8—750.6) or thereabouts as soon as the advance warrants.

The accompanying gun has two caissons and an extra team. It is commanded by Lieutenant A.

The bridge over Salt Creek at Frenchman's is out of commission, but will be ready for heavy traffic in about one hour after the attack begins.

H hour is at 6:00 AM.

Required:

The initial position and arrangements for the accompanying gun.

Time allowed: Thirty minutes. Assemble at Frenchman.

PART II

Map: Fort Leavenworth and Vicinity, 1:21120, Leavenworth Sheet.

Special Situation (Blue) Continued:

The accompanying gun crossed Salt Creek near the bridge at Frenchman about 30 minutes after the infantry. The assault battalion has progressed nearly as far west as Mottin farm house, and is following the barrage. The battalion commander has passed Frenchman on his way to Flint farm house. He stated that there is strong rifle and automatic fire from the vicinity of J. Hund farm house and machine gun fire from the direction of hill 926 (343.8—752.2), and directed that the accompanying gun occupy a position and assist in the reduction of these resistances.

Required:

The position of the accompanying gun and its vehicles, the route followed, and its action in case it is fired upon by the hostile artillery.

Time allowed: Twenty minutes. Assemble at Flint farm house.

PART III

Map: Fort Leavenworth and Vicinity, 1:21120, Leavenworth Sheet.

Special Situation (Blue) Continued:

The accompanying gun occupied a position 200 yards west of Flint farm house south of the road at about point

344.6—750.6. After the capture of J. Hund farm house, the battalion commander moved his command post to that vicinity, and directed the accompanying gun to move near there. On arriving at the J. Hund farm house, the gun commander learned that the infantry, on attempting to continue westward from the J. Hund orchard, had been taken under severe flanking fire from machine guns on the wooded spurs in the vicinity of point 342.8—752.7. Some of the guns are visible from time to time.

Required:

The position taken by the accompanying gun and the route; also the disposition of the carriages during the movement.

Time allowed: Thirty minutes. Assemble at J. Hund.

PART IV

Map: Fort Leavenworth and Vicinity, 1:21120, Leavenworth Sheet.

Special Situation (Blue) Continued:

The accompanying gun took position in the northwest corner of the J. Hund orchard and fired effectively on the flanking machine guns. Shortly thereafter the infantry advancing westward from north of road junction I reported machine gun firing from the vicinity of hill 944.

Required:

Should the accompanying gun be moved? If so, to what point and by what route; if not, how will the fire be conducted?

Time allowed: Twenty minutes. Assemble at road junction I.

An Approved Solution

Prepared by
Major Lesley J. McNair,
Field Artillery

PART I

During the night preceding the attack, the gun should take a concealed position in readiness as close as possible behind the line of departure, with the idea of moving promptly as soon as the advance has progressed sufficiently far to warrant it. In this case, a suitable position is near the Baker farm house (345.7—749.8). East of Sentinel Hill affords good cover and is well advanced, but the route of egress the following morning would be more exposed.

As far in advance of the attack as possible, the gun commander should report to the infantry assault battalion commander, confer with him, ascertain the latter's plans, and suggest a plan for employing the gun. Details should be arranged at this time as far as possible. The gun commander should select his initial position the day before the attack or earlier. He should reconnoiter his route of advance as far as the front line and prepare it if necessary. In this case, the crossing of Salt Creek should be selected and prepared if possible; otherwise the necessary material should be collected beforehand so that the work can be done in a minimum of time during the attack. The exact location of the elements of the gun were discussed on the ground.

PART II

In the corner of the hedge south of the road at about point 344.6-750.6; the limber and caissons placed irregularly in the wooded low ground about 200 yards to the south-The carriages would be brought forward singly moving as rapidly as possible, the route being selected before the carriages start. The road would be followed from Frenchman across the railroad 400 yards to the west. The gun then would leave the road sharply to the south so as to gain the low ground; the horses would be used to take the gun as near as possible to the position without exposure, after which the gun would be moved by hand. In case the gun were attacked by the hostile artillery, it would be withdrawn by hand at once to a concealed position, say 20 to 100 yards in rear. Depending on the volume and accuracy of the hostile fire, the cannoneers would take shelter temporarily, or limber the piece and take another position. A promising position would be about 100 yards to the west; another is near Flint farm house; the choice would be influenced by the existing conditions; the original position would hardly be susceptible of further employment.

PART III

In the northwest corner of the J. Hund orchard, with the horses and caissons to the east under cover. This gives direct observation on the machine guns encountered, and direct laying may be used. The gun is well concealed, entirely so from the west. The route would be near and south of the hedge bordering the road as far as the Mottin farm house, among the trees in the yard, thence west more or less in the open, across the road, and to position under cover of the trees about the J. Hund house. The carriages would move individually at distances of say 100 yards, and at exposed points must take an increased gait.

PART IV

The gun should not be moved. Reconnaissance will show that movement at this time is difficult without exposure and can be for but a short distance at best. Observation can be sent quickly 300 yards to the west, where a good view is obtained, and the fire conducted by indirect laying.

Comments

The exercise is intended primarily to be an example of how an accompanying gun follows an infantry advance over fairly open terrain. It will be noted that the gun makes no definite plans to participate in the attack by fire at the beginning; it rather devotes its energies to crossing the initial obstacle promptly so as to be available later when an opportunity for its profitable employment is more likely. This is a typical procedure, though it might be necessary for the gun to fire before crossing the line of departure.

While the gun changes position rather frequently, these changes are in each case necessitated by the terrain or the desirability of keeping close touch with the infantry battalion commander. No attempt is made to have the gun follow at a certain distance behind the infantry.

Time does not permit going into details of orders, but it should be noted that the infantry battalion commander indicated a mission in each case in more or less general terms and sometimes indicated the general location for the gun. The indication of a position is not essential, as long as the gun commander is given information as to the position of the infantry and the battalion command post; he naturally will seek a position convenient to the battalion commander. In all except the last situation, the gun commander was by his piece.

A caisson is rarely unlimbered alongside the gun, but one or both would be conveniently near so that the ammunition could be carried by hand without delay.

The details of reconnaissance are not dwelt upon, but this element is of the greatest importance. The gun should not be moved, much less exposed, until it has been decided just where it is to go; for the gun to wander about aimlessly would be to invite destruction. Movement is habitually by single carriage; if the carriages are united in column, the target presented is very tempting and vulnerable, and much more apt to be observed.

THE GENERAL SERVICE SCHOOLS

The School of the Line 1920-1921

Course in Tactics and Technique (TT 56)

TACTICAL RIDE No. 13, Cavalry Cavalry Reconnaissance

October 25, 1920

Prepared by
Major Kerr T. Riggs,
Cavalry

Maps: Road Map of Easton, Kansas, and Vicinity.

General Situation:

Missouri (Blue) and Kansas (Red) are at war. A Red army is concentrating northwest of Atchison. A Blue army is preparing to invade Kansas.

Note:—Atchison is about 20 miles northwest of Leavenworth on the Missouri River. The Fort bridge cannot be used until repaired.

First Special Situation (Blue):

The plan of the Blue army commander is to cross the Missouri River at Leavenworth and advance to the line of Stranger Creek, upon which line the Blue army is to be deployed for further offensive operations. The 1st Blue Division, with 1st Squadron, 1st Cavalry, attached, is ordered to cross the river at Leavenworth on the afternoon of 25 October and to advance immediately to Stranger Creek in the vicinity of Easton, pushing back any hostile troops encountered and making room for the deployment of the army.

The 1st Squadron, 1st Cavalry, under Major A, constitutes the advance cavalry of the 1st Blue Division. It is operating under the following verbal instructions given to Major A by the division commander on the night of 24-25 October:

"A Red force of all arms, estimated at about one division, arrived at Atchison yesterday (23 October) from the northwest. Hostile cavalry patrols were in Leavenworth this afternoon (24

October). About one troop of hostile cavalry was reported near Stony Point School this afternoon, but this has not been confirmed

firmed.

"The division is to cross the Missouri River by the Terminal Bridge tomorrow afternoon (25 October) and advance toward Easton via the Atchison Pike—Fort Riley Road. The head of the advance guard will arrive at the bridge at about 1:00 PM. A company of infantry from the advance guard will be sent in trucks to arrive at the bridge at 7:00 AM and hold it until the arrival of the advance guard.

arrival of the advance guard.

"You will march tonight with your squadron so as to cross the bridge at daylight tomorrow morning. Cover the march of the division by reconnoitering as far west as Stranger Creek between the Lecompton Road and the line Kickapoo—Potter. I particularly desire information of any enemy advance from the direction of Atchison.

"The division signal officer will establish motorcycle messenger service between the Terminal Bridge and the division, beginning at 7:00 AM.

"The division command post will be established at Leavenworth at 2:00 PM."

Before starting out Major A assembled the squadron officers and explained to them the division commander's order and the mission of the squadron.

In compliance with this order, Major A crossed the Terminal Bridge with his squadron at 6:00 AM, 25 October, driving off a Red cavalry patrol that was watching the bridge. The Red patrol fled northward pursued by a Blue patrol (from Troop A) under Sergeant L. A hasty reconnaissance of the city of Leavenworth failed to discover any further indications of the presence of the enemy. Major A, after issuing extra ammunition, left his combat train near the bridge and proceeded with his squadron in march formation to the northern edge of the city.

At 7:00 AM the advance guard, consisting of Troop A, 7:00 AM is halted near road junction 870, opposite the U. S. Penitentiary. The head of the main body is at road junction 859 (Seventh Street and Metropolitan Avenue). Order of march of main body is Troops B, C, D. Major A, his staff and the four troop commanders are with the advance guard. The following message has just been received from Sergeant L:

Patrol Tr A, 1st Cav, Hill east of junction Plum and Salt Creeks, 25 Oct 20, 6:30 AM.

Major A:

I pursued the Red patrol to this point. It has just disappeared toward Kickapoo, moving along the Missouri Pacific R. R. No other hostile troops have been seen. I remain in observation here.

L, Sgt. Required:

Orders as actually issued by Major A for the reconnaissance by the squadron.

Time allowed: Twenty minutes.

An Approved Solution to First Requirement

7:05 AM

Programme participation and security of the se

To assembled troop commanders, staff and officers of advance guard:

"The Red patrol that was driven away from Terminal Bridge has retreated toward Kickapoo. There is no other new information of the enemy.

"Sergeant L's patrol is near the junction of Plum and Salt

"The squadron will take up its reconnaissance toward Stranger Creek. For the present it will march on Eight Mile House

via the Atchison Pike.

"Captain B (Troop B), take your troop and reconnoiter to Stranger Creek between the Lecompton Road and the 864—1067—974—Mt. Olivet road, both inclusive. Send a strong patrol via the Lecompton Road. Send your messages to the U.S. Penitenriary. I shall send messages to you via Glenn Valley School—road junction 909—road junction 1018. If you leave that road or go beyond road junction 1018, leave a relay post to forward messages to you.

"Lieutenant X (Troop A), take a section of your platoon

"Lieutenant X (Troop A), take a section of your platoon and proceed via Fort Leavenworth and Kickapoo to Spencer School. Reconnoiter the country between Round Prairie School and the Missouri River. Send a patrol via Sheridan Drive.

"Captain E (Troop A), continue the march by Atchison Pike with the remainder of your troop as advance guard. Send out at once officers' patrols to Easton, and via Atchison Pike to

Hayes School.
"The main body, in order of march, Troop C, Troop D, will follow the advance guard at about three-quarters of a mile.

"Early information of any hostile advance from the direction of Atchison is of special importance.

"Messages (except those from Troop B) to the head of the

main body. Lieutenant Z (adjutant), establish a relay post, consisting of one noncommissioned officer and six men at the U.S. Penitentiary, to forward messages to me from Captain B and from the division commander. Direct the noncommissioned officer in charge to notify Captain F (infantry at the bridge) of the location of the relay post. "Move out."

Second Special Situation (Blue):

The reconnaissance was commenced as ordered by Major A. Lieutenant X, with his patrol from Troop A, moved by the road running north from the U.S. Penitentiary. Troop B moved out and turned south at road junction 864. After receiving their instructions, the two officers' patrols from Troop A trotted out via Atchison Pike. The squadron took up its march on Atchison Pike. To permit the reconnoitering detachments to get well forward, it halted for about one-half hour with head of main body just southeast of Frenchman's. The squadron intelligence officer established a temporary observation post on the hill one-half mile east of Frenchman's. At 8:25 AM an observer reported that Lieutenant X's patrol had just passed Coffin School going north. At 8:27 AM the squadron resumed its march.

As the head of the main body is approaching road junc- 8:50 AM tion 891, Major A at the head of the main body, receives the following message (forwarded by advance guard commander) from the officer's patrol that had been sent toward Hayes School:

Patrol, Tr A, 1st Cav, Eight Mile House, 25 Oct 20, 8:25 AM.

Captain E:

A strong column of hostile infantry is approaching Eight Mile House from the northwest on Atchison Pike. Advance guard consists of about a battalion of infantry with a few mounted men. Point of advance guard is now ½ mile northwest of Eight Mile House. I shall work around to the west to discover strength of column.

Y, Lt.

No other information of the enemy has been received.

Required:

Actions taken by Major A up to 9:00 AM.

Time allowed: Twenty minutes.

An Approved Solution to Second Requirement

Halts main body. Reads message to staff and captain 8:51 AM of leading troop.

To intelligence officer:

"Direct Captain E to move rapidly with the advance guard out Atchison Pike, get contact with the enemy and delay his advance. Tell him the main body will follow."

To adjutant:

8:52 AM

8:57 AM

"Take down this message for the division commander:
"Enclosed message received from officer's patrol sent out
from advance guard. No other new information of the enemy
has been received. I am moving west to oppose enemy's ad-

"Enclose message from Lieutenant Y.

"Also make a copy of Lieutenant Y's message and send it to Captain B, with written instructions for him to continue his reconnaissance."

Puts squadron in march to follow advance guard.

THE GENERAL SERVICE SCHOOLS

The School of the Line

1920-1921

Course in Tactics and Technique
TACTICAL RIDE No. 14, Cavalry
(TT 58)

October 26, 1920

Prepared by COLONEL E. E. BOOTH, Cavalry

Maps: Road Map, Easton, Kansas, and Vicinity, 1:62500. Leavenworth Sheet, Topographical Map of Leavenworth and Vicinity, 1:21120.

PART I

General Situation:

The Missouri River is the boundary between two states at war, Missouri, Blue, and Kansas, Red.

The Blue state has concentrated its I Corps, to which is attached a cavalry regiment. This corps is moving westward to invade Red territory.

The Red state has concentrated one division and one regiment of cavalry in the vicinity of Valley Falls.

Special Situation (Blue):

The 1st Blue Cavalry crossed the Missouri River at Leavenworth during the forenoon of 26 October, 1920, and halted for the midday meal and feed on the West End Parade, Fort Leavenworth. It is covered by a line of observation posts on the hills to the west thereof.

At 1:00 PM the regiment is saddled and ready to move and Colonel A, commanding, issues the following verbal orders to the assembled squadron commanders and regimental staff officers:

"A Red force of all arms, estimated at one division, is approaching Winchester from the west. Red cavalry patrols were in Easton at 10:00 AM this morning.

"Our corps crosses the Missouri River this afternoon and tomorrow.

"This regiment moves at once to Easton to screen the advance of our corps. All hostile troops will be pushed back and kept west of the Big Stranger Creek.

"One platoon, Troop D, starting at 1:10 PM and marching via Disciplinary Barracks—Coffin School—869—Oak Grove School—Millwood to Easton will cover the right flank; one platoon, Troop D, starting at 1:10 PM and marching via U. S. Penitentiary 1067, 821 Mt. Olivet School to Easton will cover the left -1067-831-Mt. Olivet School to Easton, will cover the left flank. These platoons will drive off all hostile patrols encountered and report location and movements of larger hostile bodies discovered.

"The advance guard, consisting of the 1st Squadron (less flanking patrols), will clear the West End Parade by 1:40 PM and march via the Frenchman—Eight Mile House—1082 road to

Easton.

"2d Squadron, machine gun troop, 3d Squadron, and head-quarters troops, in the order named, will follow the advance guard

at about 1,000 yards.

"The adjutant will direct the outpost commander to cause the observation posts to join their respective troops as soon as the point of the advance guard has passed over the ridge at the rail-road cut one mile southwest of here.

"Early information of any hostile troops east of the Big

Stranger Creek is of special importance.
"All combat and field trains will follow the main body without distance.

"A corps advance message center is located in the Headquar-

ters Building, Fort Leavenworth. "Messages for the regimental commander to head of main

First Requirement:

Orders as actually issued by the advance guard commander.

Time allowed: Fifteen minutes.

Prepare to give verbally advance guard commander's orders.

An Approved Solution-Part I

The First Requirement:

Advance guard commander:

"Mr. Adjutant," addressing his squadron adjutant, "direct the squadron troop and staff officers to assemble here at once."

Advance guard commander to assembled troop and staff 1:10 PM officers:

"A Red division is reported approaching Winchester, 20 miles west of here, from the west. Hostile cavalry patrols were in Easton at 10:00 AM today. Our corps crosses the Missouri River this afternoon and tomorrow. Our regiment moves to Easton to screen the advance of our corps. One platoon on our

right flank moves to Easton via Coffin School and Millwood and one platoon on our left flank moves to Easton via the Zimmerman Road and Mt. Olivet School.

"This squadron (less two platoons, Troop D) is the advance guard and will be followed by the regiment at about 1,000 yards.
"The support, consisting of Troop A, will move at once via
Frenchman—Eight Mile House—1082 road to Easton.
"The reserve, Troops B, C and D, in the order named, will
follow the support at 700 yards.
"Men on duty with observation posts will join their troops.

"Men on duty with observation posts will join their troops as the advance guard passes over the ridge at the railroad cut, one mile southwest of here.

"Report at once any hostile troops encountered.
"The combat and field trains will join the regimental trains

and will follow in rear of the main body.

'A corps message center is located at the Headquarters ing, Fort Leavenworth. Regimental message center at Building, Fort Leavenworth. Regimental message center at head of main body. Messages for the advance guard commander to head of the reserve."

PART II

1:47 PM

The head of the advance party has reached this point (road junction 346.7—749.5, south of Sentinel Hill).

Second Requirement:

Approximate location of each subdivision of the advance guard, and location of all patrols from the point or advance party.

Time allowed: Ten minutes.

An Approved Solution-Part II

Second Requirement:

- (a) Point of four men at bend of road at Wrigley.
- (b) Patrol of four men near north end of Sentinel Hill.
- (c) Advance party at road junction just south of south end of Sentinel Hill.
- (d) Head of support at bend of road 400 yards east of advance party, with connecting file between support and advance party.
- (e) Head of reserve 200 yards northeast of railroad cut, with three connecting files between reserve and support.
- (f) Head of main body midway between West End Parade and north end of National Cemetery, with four connecting files between main body and reserve.

PART III

As the corporal in charge of and leading the point 1:55 PM reaches this spot, between Salt Creek bridge and Frenchman, he sees a hostile mounted patrol of four men on the road about 100 yards west of Frenchman, approaching at a walk. Apparently he has not been seen by the hostile patrol.

Third Requirement:

As commander of the point, what do you do and say? Time allowed: Thirty seconds.

An Approved Solution—Part III

Third Requirement:

Instantly signal, "Enemy in sight," command, "Raise pistol; charge," and move with the point at full speed against the hostile patrol.

PART IV

The advance party is 200 yards east of Salt Creek 1:56 PM bridge. The lieutenant in charge sees the connecting file signal "Enemy in sight" and gallop out of sight around the bend in the road. Immediately thereafter he hears a number of pistol shots. He tells the sergeant to follow at the trot, while he with his orderly gallops forward to the bridge, where he meets a returning member of the point, who excitedly reports, "We have just driven a hostile point back on its advance party. The hostile advance party, about 20 men, in column, is halted in the road just the other side of a railroad crossing, about 300 or 400 yards west of here. There is a fence on both sides of the road."

Fourth Requirement:

As commander of the advance party, what do you say and do?

Time allowed: Thirty seconds.

An Approved Solution—Part IV

Fourth Requirement:

I instantly signal "Trot." I tell the man from the point, "Proceed as fast as you can to the support, report

what you have seen and that our advance party is charging the hostile advance party." I ride forward so as to look around bend in the road, and when advance party approaches, I give the command, "Raise pistol; gallop," and lead the advance party in a charge against the hostile troops.

PART V

The messenger from the advance party meets the sup- 2:00 port 400 yards southeast of the Salt Creek bridge and reports as instructed. The support commander directs the messenger:

"Proceed at a gallop to the reserve, repeat what you have told me and report that the support is moving forward at a trot to the assistance of the advance party."

He then says to the lieutenant of the leading platoon, who has heard the messenger's report:

"I am galloping forward to reconnoiter. Follow with the support at a trot."

As he proceeds with his messengers, he hears firing in front and on reaching Frenchman, he sees some of the men of his advance party coming back over the hill at Flints, 200 yards west of the railroad, most of whom stop as soon as they get under the east crest of the hill.

On reaching the crest of the ridge 75 yards west of ^{2:08} Flints, he meets the advance party commander who reports:

"I have just driven the enemy's advance party back on his support. The hostile support, about one troop, is halted in a swale, about 100 yards the other side of those trees yonder (pointing to trees at Mottin's house). Our men there (pointing to three or four men on the side of the road just east of the trees) are observing the enemy. There is a fence along the left side of the road, but none on right beyond that fence there (pointing to a fence about 100 yards to the west)."

At this instant, the support commander observes a mounted column coming down the hill 1,000 yards west of the Hund house. His own support is crossing the railroad track just east of Flint.

Fifth Requirement:

As support commander what do you do?

Time allowed: Thirty seconds.

An Approved Solution-Part V

Fifth Requirement:

When the support arrives at Flints, still moving a trot, I direct it to proceed, and riding along side the comm der of the column, I say:

"A small enemy mounted column is halted in the road over the next hill, about 600 yards west of here. 2d Plat (leading platoon), pistol attack, in column, straight down road. 3d Platoon, move to right through this open field this time the column has reached the open field) and attack enemy's flank."

Then turning to one of the messengers, I say:

"Go at full speed to the reserve and report that I am att: ing a hostile troop which is about 600 yards west of this ho and that the head of another hostile column is in view about 1, yards west of this house."